

Introduction: The guidelines that determine whether a given map is permissible or preferable are usually found in the state constitution for each state. These rules can vary significantly from state to state and are almost never written with any sort of mathematical specificity. Thus, if we are going to do some quantitative analysis of redistricting plans, we first need to **operationalize** the legislative text, which means turning legal language into mathematical functions to evaluate. This is not a well-defined process and there are many modeling decisions that have to be made for each state independently, incorporating additional guidance from the legislature and subcommittees, historically acceptable plans, and litigation history, among others.

Goal(s): Experience the operationalization process. Understand the role of mathematical modeling in redistricting analysis. Evaluate potential hierarchies and tradeoffs between criteria.

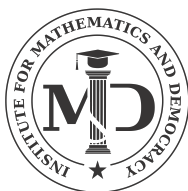
Activity: The state constitutional language for Kansas is reproduced below:

- **Congressional:**

1. The basis for congressional redistricting is the 2010 U.S. Decennial Census as published by the U.S. Department of Commerce, Bureau of the Census. The “building blocks” to be used for drawing district boundaries shall be Kansas counties and voting districts (VTDs) as their population is reported in the 2010 U.S. Decennial Census.
2. Districts are to be as nearly equal to 713,280 population as practicable.
3. Redistricting plans will have neither the purpose nor the effect of diluting minority voting strength.
4. Districts should attempt to recognize “community of interests” when that can be done in compliance with the requirement of guideline No. 2.
 - (a) Social, cultural, racial, ethnic, and economic interests common to the population of the area, which are probable subjects of legislation (generally termed “communities of interest”), should be considered.
 - (b) If possible, preserving the core of the existing districts should be undertaken when considering the “community of interests” in establishing districts.
 - (c) Whole counties should be in the same congressional district to the extent possible while achieving population equality among districts. County lines are meaningful in Kansas and Kansas counties historically have been significant political units. Many officials are elected on a countywide basis, and political parties have been organized in county units. Election of the Kansas members of Congress is a political process requiring political organizations which in Kansas are developed in county units. To a considerable degree most counties in Kansas are economic, social, and cultural units, or parts of a larger socioeconomic unit. These interests common to the population of the area, generally termed “community of interests” should be considered during the creation of congressional districts.
5. Districts should be as compact as possible and contiguous, subject to the requirement of guideline No. 2.

- **State-level**

1. The basis for legislative redistricting is the 2010 U.S. Decennial Census as recalculated by the Kansas Secretary of State pursuant to Article 10, Section 1 of the Constitution of the State of Kansas and KSA 11-301 et seq.
2. Districts should be numerically as equal in population as practical within the limitations of Census geography and application of guidelines set out below. Deviations should not exceed plus or minus 5 percent of the ideal population of 22,716 for each House district and 70,986 for each Senate



district, except in unusual circumstances. (The range of deviation for House districts could be plus or minus 1,136 persons, for districts that could range in population from 21,580 to 23,852. The overall deviation for House districts could be 2,272 persons. The range of deviation for Senate districts could be plus or minus 3,549 persons, for districts that could range in population from 67,437 to 74,535. The overall deviation for Senate districts could be 7,098 persons.)

3. Redistricting plans will have neither the purpose nor the effect of diluting minority voting strength.
4. Subject to the requirement of guideline No. 2:
 - (a) The “building blocks” to be used for drawing district boundaries shall be voting districts (VTDs) as described on official 2010 Redistricting U.S. Census maps.
 - (b) Districts should be as compact as possible and contiguous.
 - (c) The integrity and priority of existing political subdivisions should be preserved to the extent possible.
 - (d) There should be recognition of similarities of interest. Social, cultural, racial, ethnic, and economic interests common to the population of the area, which are probable subjects of legislation (generally termed “communities of interest”), should be considered. While some communities of interest lend themselves more readily than others to being embodied in legislative districts, the Committee will attempt to accommodate interests articulated by residents.
 - (e) Contests between incumbent members of the Legislature or the State Board of Education will be avoided whenever possible.
 - (f) Districts should be easily identifiable and understandable by voters.

Discussion Questions: Once you’ve completed the exercise, use the following questions to reflect on this exercise (we’ll also discuss them together in a little bit):

1. How many criteria are listed in the constitution?
2. Are any of these criteria surprising to you?
3. Are there criteria that aren’t listed that still must be applied?
4. What is/are the most important criteria, according to the legislative text?
5. Is a plan that satisfies these criteria guaranteed to be fair? Why or why not?
6. What differences are there between the state legislative rules and the Congressional rules.
7. Would partisan gerrymandering be permitted under these constraints? What about other types of gerrymandering? Does it matter which types of districts are under consideration?

